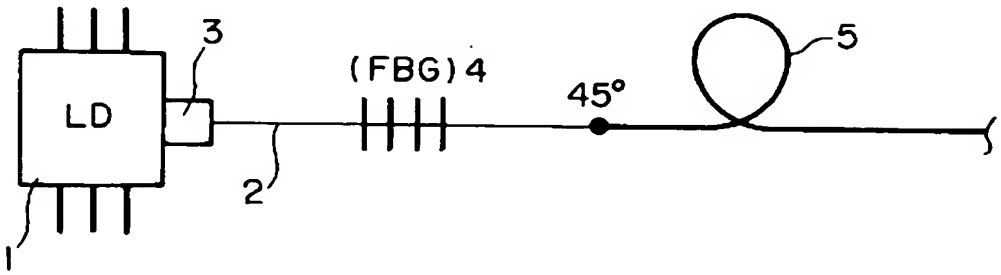
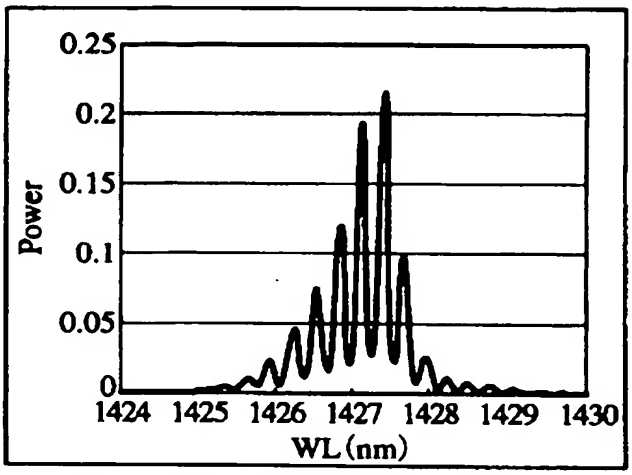


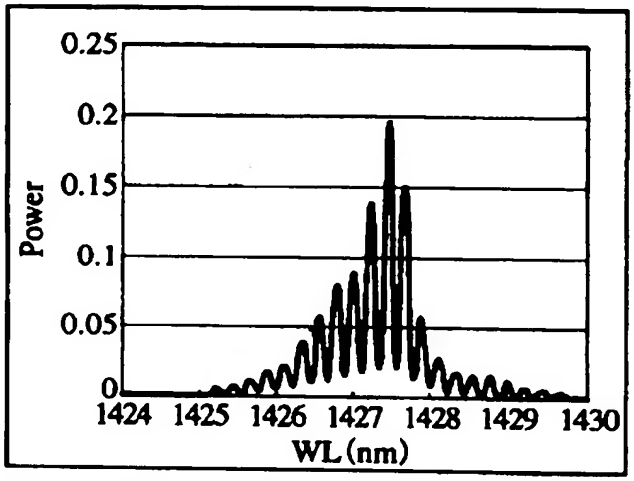

FIG. 1

FIG. 2A



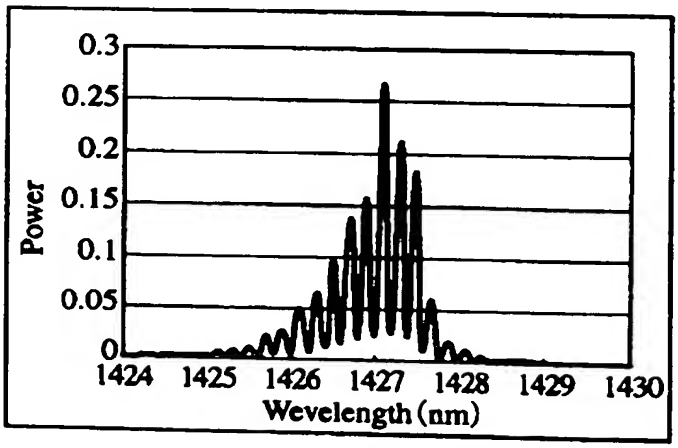

LD spectrum of cavity length 1mm

FIG. 2B




LD spectrum of cavity length 1.3mm

FIG. 2C




LD spectrum of cavity length 1.5mm

FIG. 3A

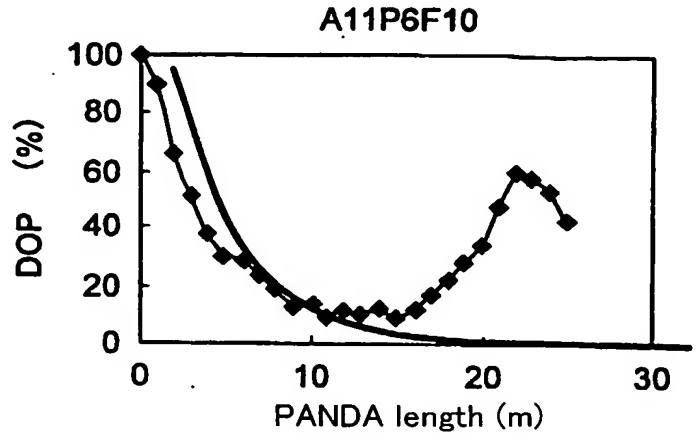



FIG. 3B

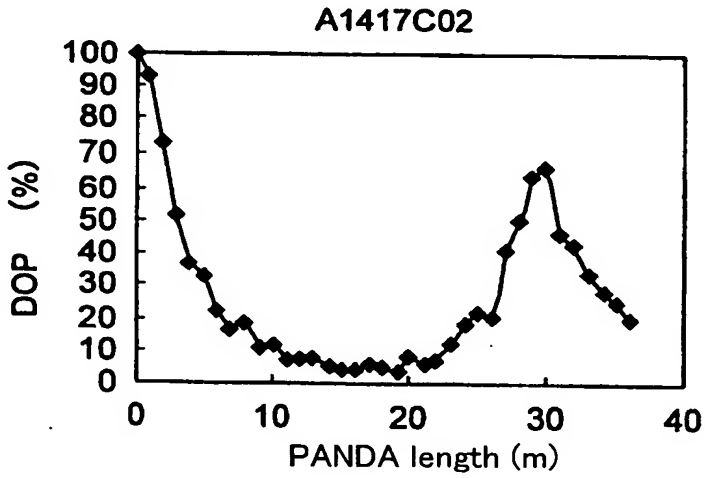
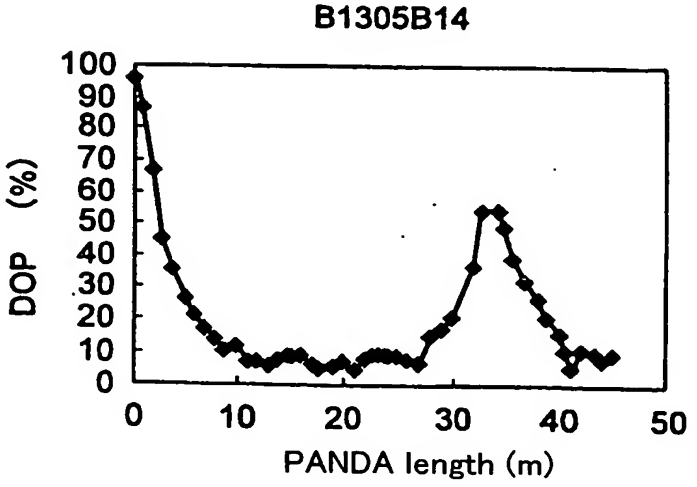
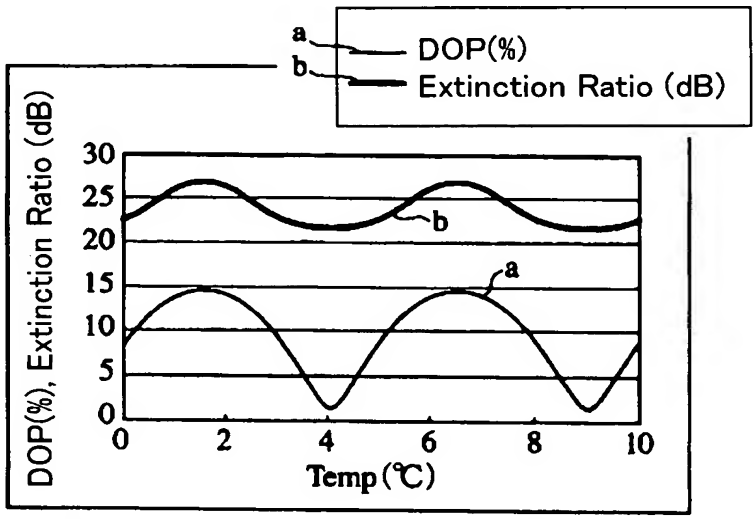



FIG. 3C






Temperature variation of DOP and Extinction ratio

LD:FWHM=0.75nm, Q-Series, $\theta$ =5° PMF=1m, Beat length=5.2mm@1550nm
Depolarizer:15m, Beat length=5.2mm@1550nm

FIG. 4

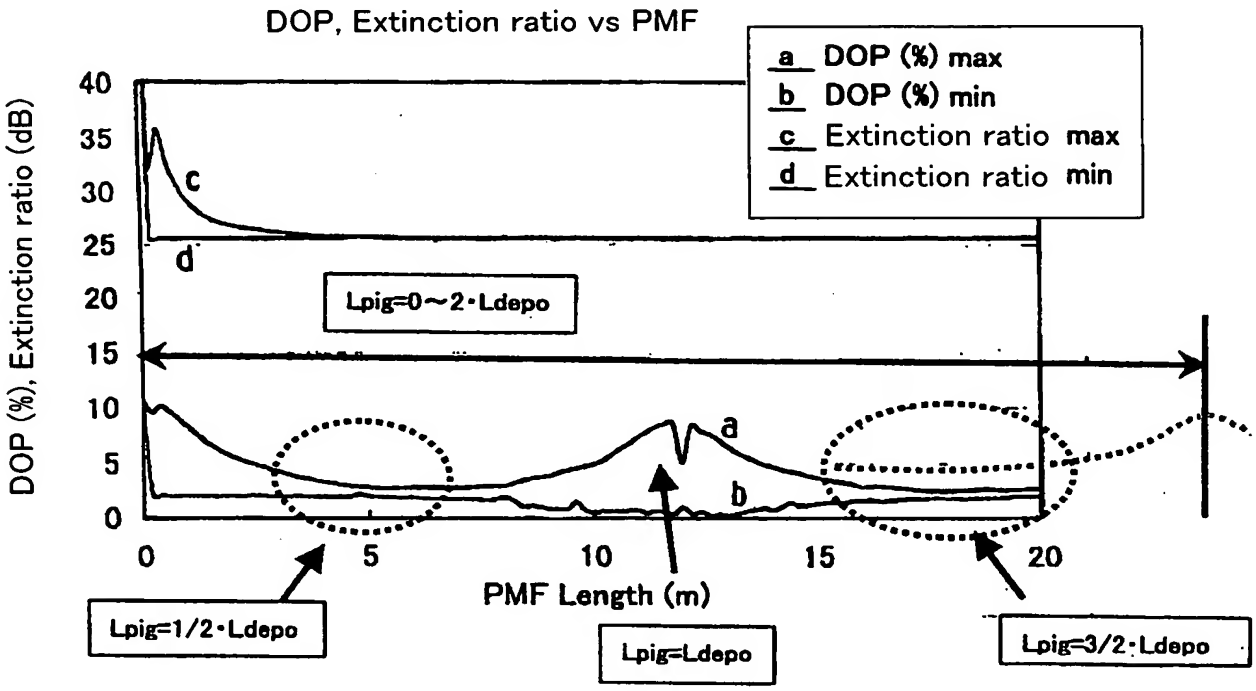

DOP, Extinction ratio vs PMF
a DOP (%) max
b DOP (%) min
c Extinction ratio max
d Extinction ratio min
DOP (%), Extinction ratio (dB)
40
35
30
25
20
15
10
5
0
c
d
Lpig=0～2・Ldepo
a
b
0
5
10
15
20
PMF Length (m)
Lpig=1/2・Ldepo
Lpig=Ldepo
Lpig=3/2・Ldepo

FIG. 5

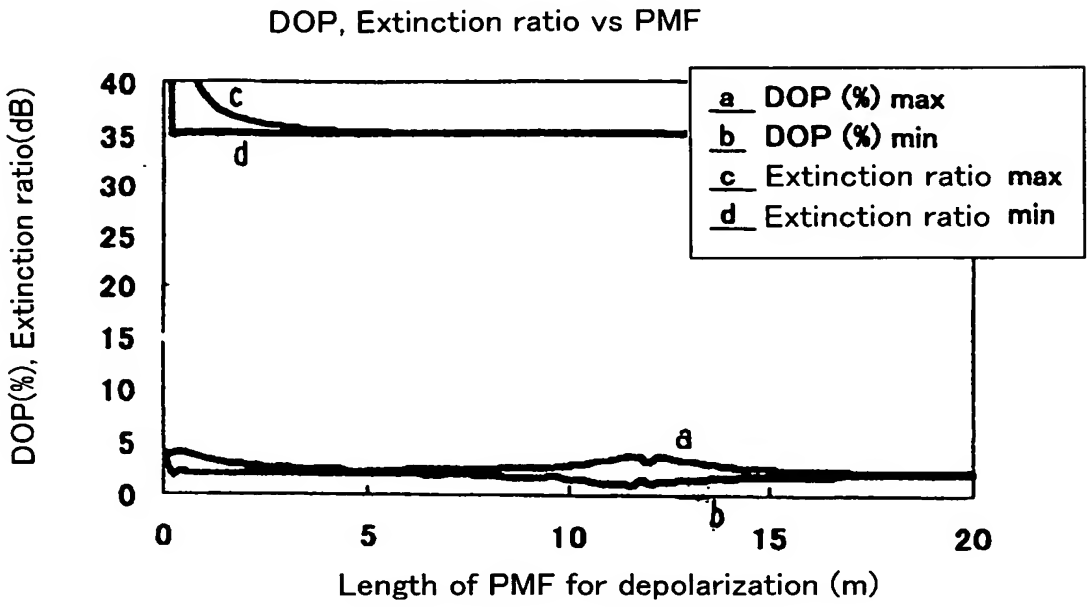

DOP, Extinction ratio vs PMF
DOP(%), Extinction ratio(dB)
40
35
30
25
20
15
10
5
0
0
5
10
15
20
Length of PMF for depolarization (m)
a DOP (%) max
b DOP (%) min
c Extinction ratio max
d Extinction ratio min
a
b
c
d

FIG. 6

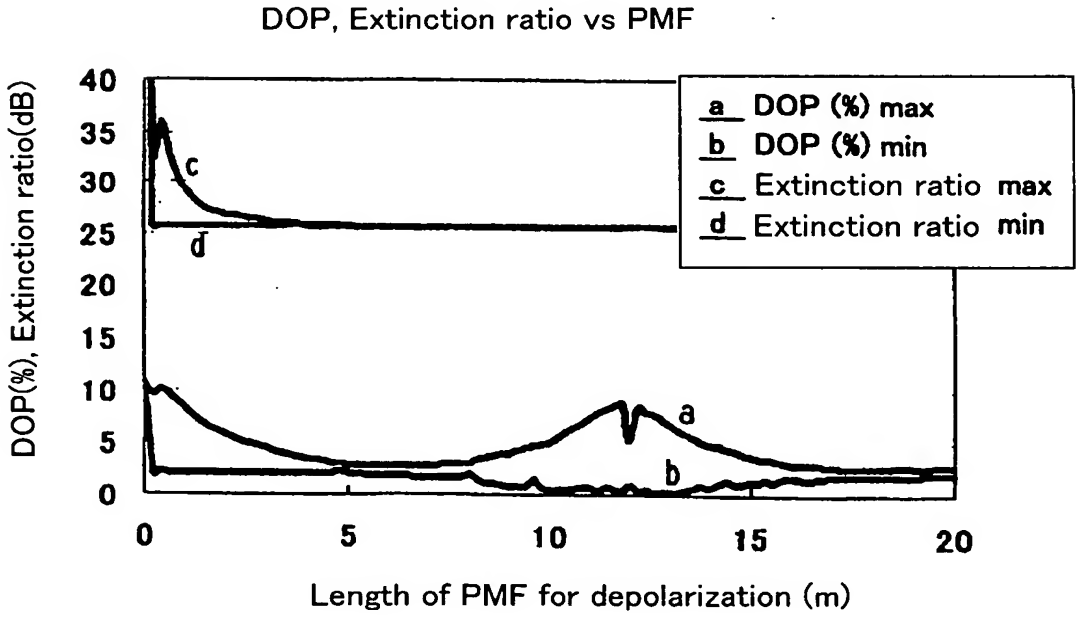

DOP, Extinction ratio vs PMF
DOP(%), Extinction ratio(dB)
40
35
30
25
20
15
10
5
0
0
5
10
15
20
Length of PMF for depolarization (m)
a DOP (%) max
b DOP (%) min
c Extinction ratio max
d Extinction ratio min
a
b
c
d

FIG. 7

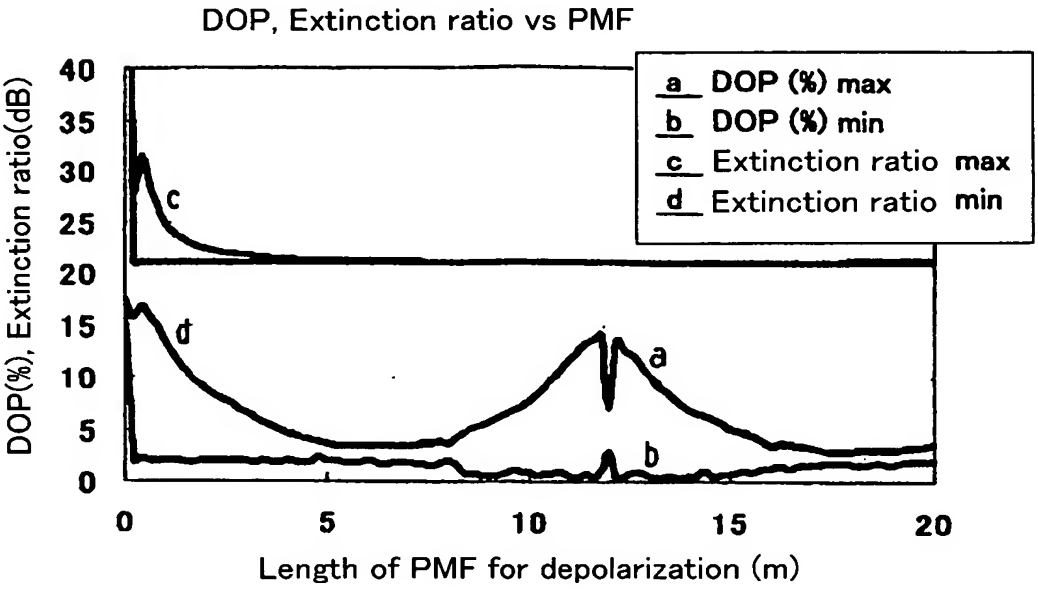

DOP, Extinction ratio vs PMF
DOP(%), Extinction ratio(dB)
40
35
30
25
20
15
10
5
0
0
5
10
15
20
Length of PMF for depolarization (m)
a DOP (%) max
b DOP (%) min
c Extinction ratio max
d Extinction ratio min
a
b
c
d

FIG. 8

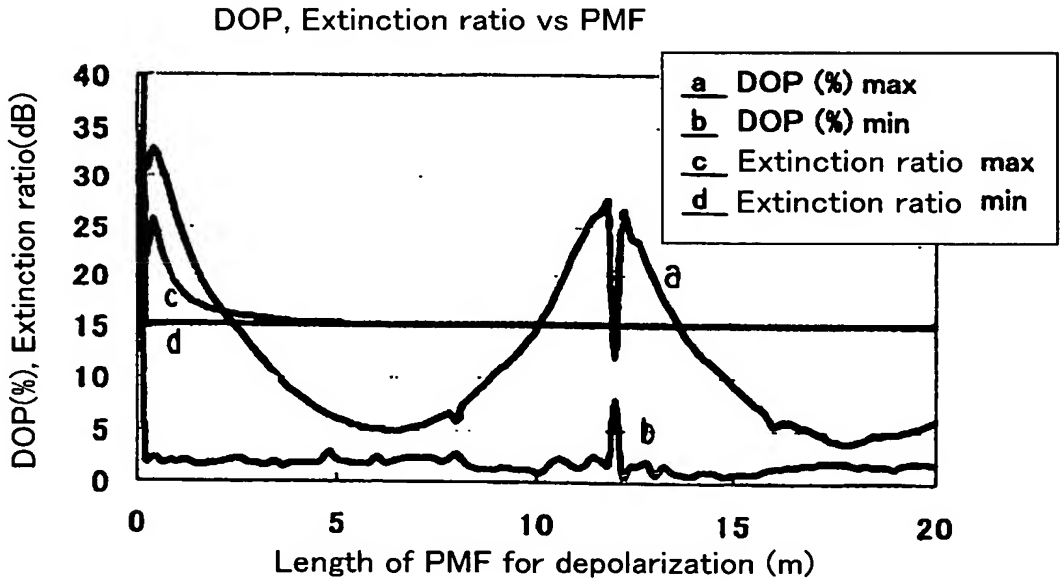

DOP, Extinction ratio vs PMF
DOP(%), Extinction ratio(dB)
40
35
30
25
20
15
10
5
0
0
5
10
15
20
Length of PMF for depolarization (m)
a DOP (%) max
b DOP (%) min
c Extinction ratio max
d Extinction ratio min
a
b
c
d

FIG. 9

FIG. 10A

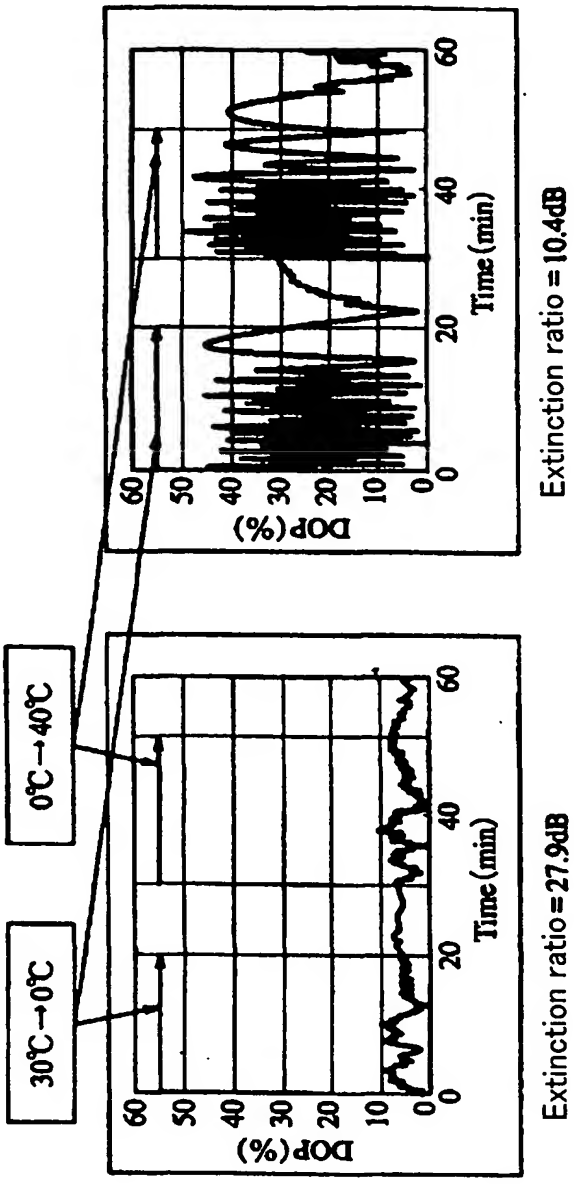



FIG. 10B

Temperature variation of DOP
-Series, Depolarizer: PMF=12m, Beat Length=5.2mm@1550nm

Ldepo=17m, Lpig=1m, Extinction ratio=15.7dB, $\Delta\lambda$ =0.20nm

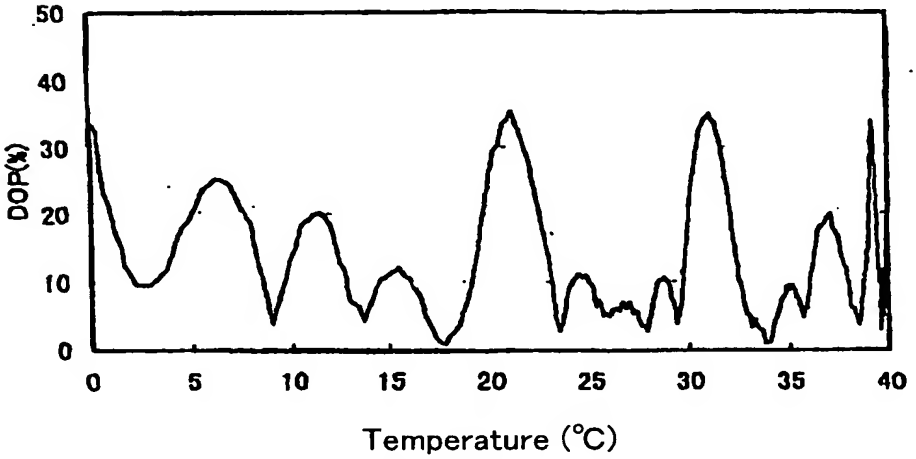



FIG. 11

Ldepo=17m, Lpig=1m, Extinction ratio=15.7dB, $\Delta\lambda$ =0.20nm

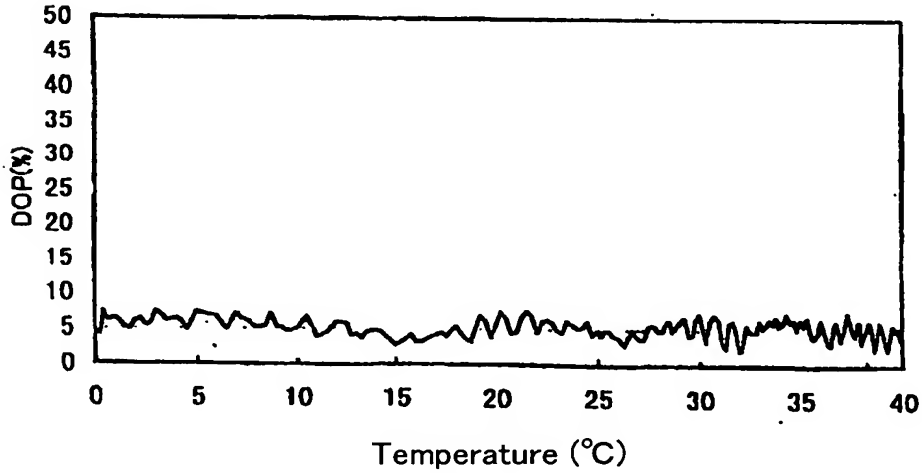



FIG. 12

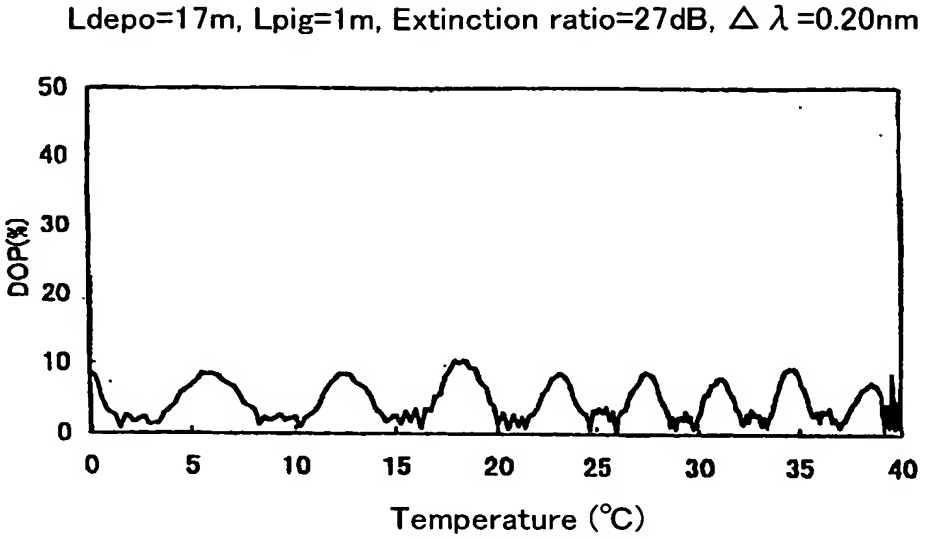

Ldepo=17m, Lpig=1m, Extinction ratio=27dB, △ λ =0.20nm
DOP(%)
50
40
30
20
10
0
0
5
10
15
20
25
30
35
40
Temperature (℃)

FIG. 13

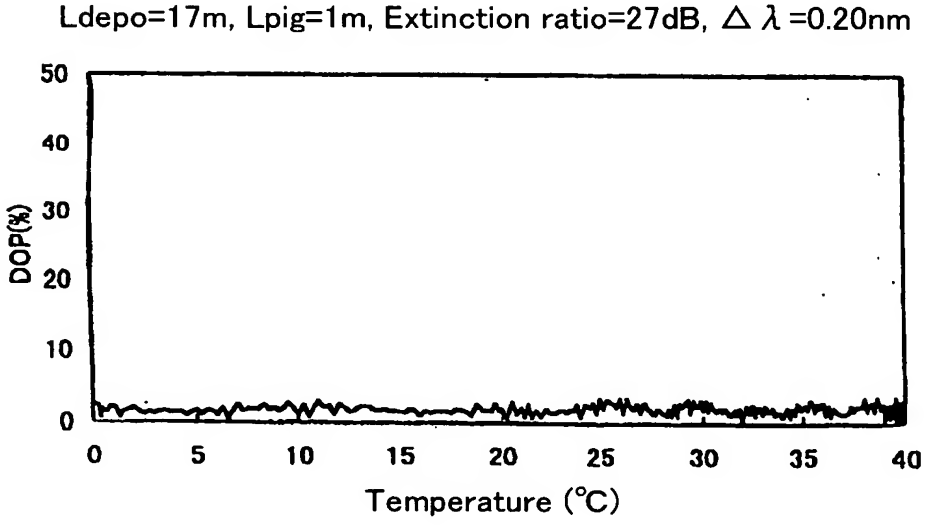

Ldepo=17m, Lpig=1m, Extinction ratio=27dB, △ λ =0.20nm
DOP(%)
50
40
30
20
10
0
0
5
10
15
20
25
30
35
40
Temperature (℃)

FIG. 14

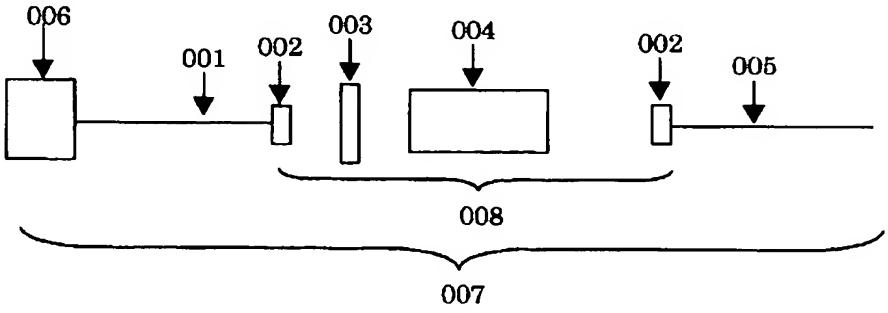



FIG. 15

Depolarizer

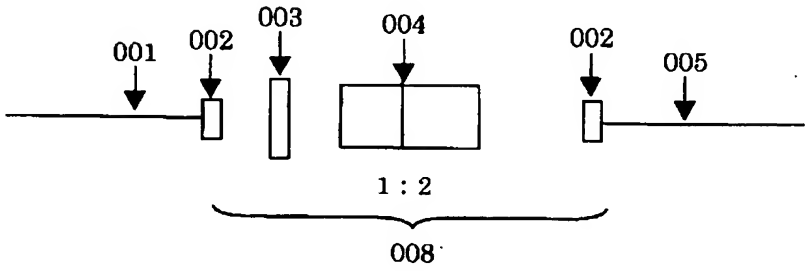



FIG. 16

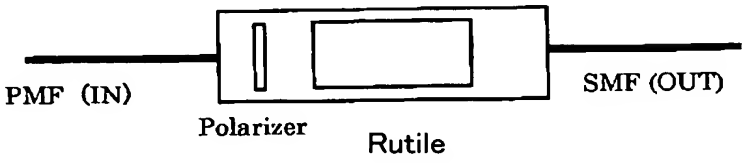



FIG. 17

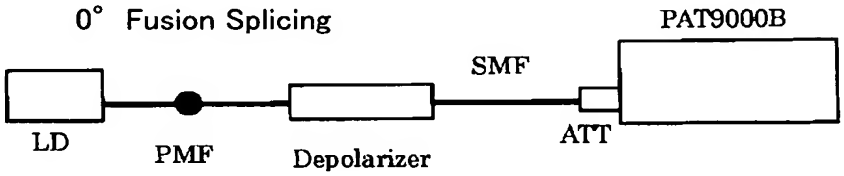



FIG. 18

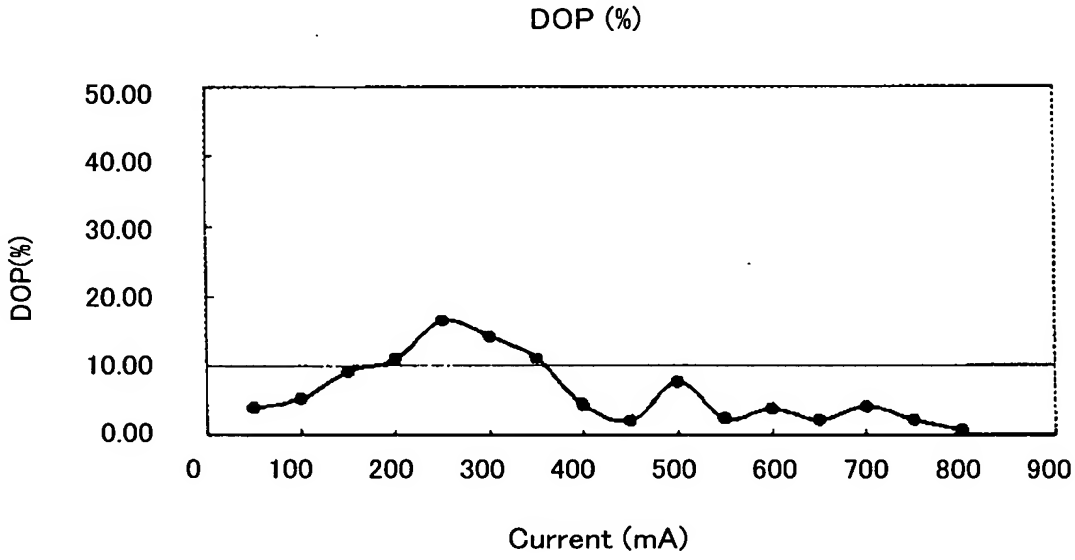



FIG. 19

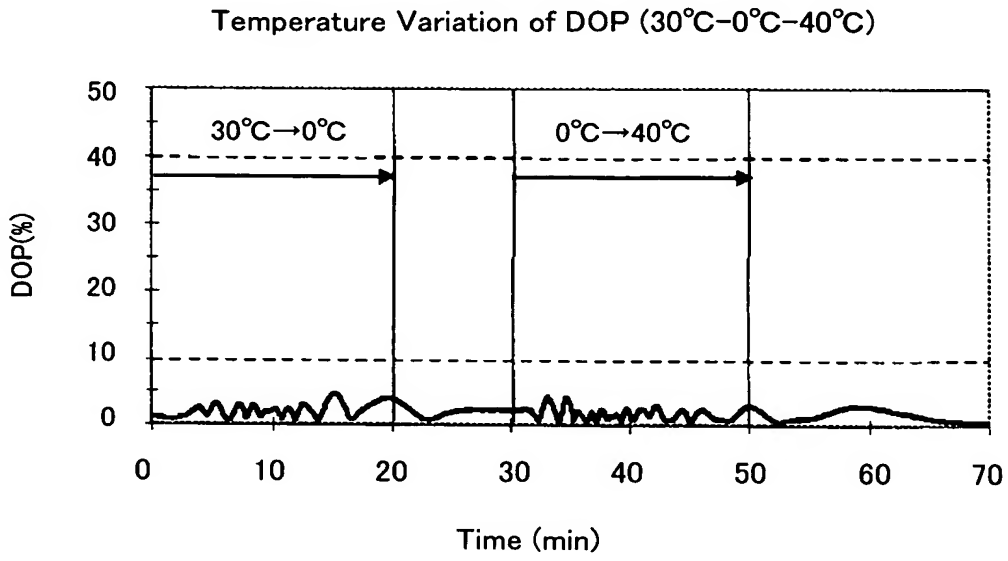



FIG. 20

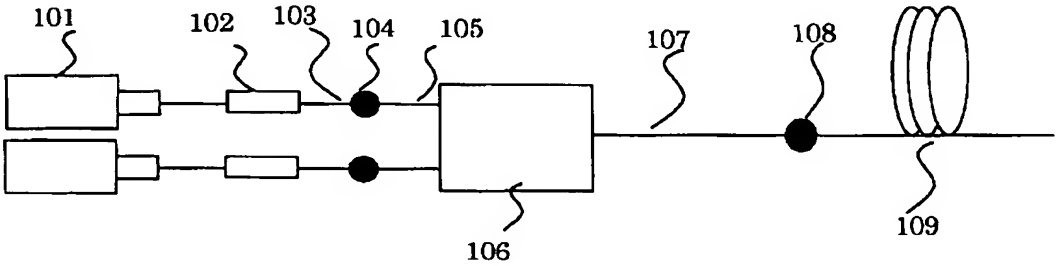



FIG. 21

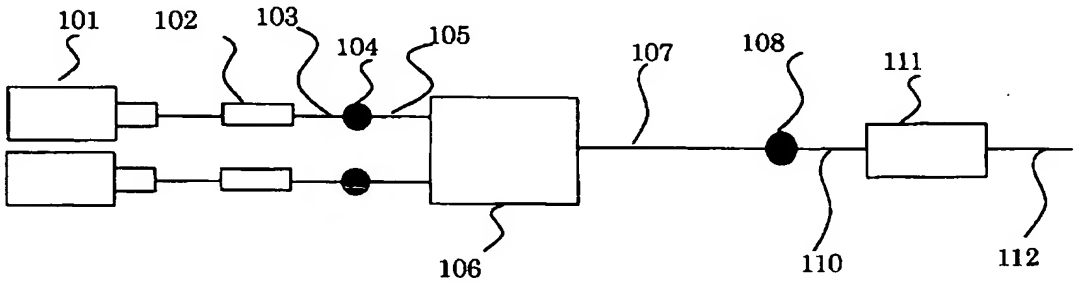



FIG. 22

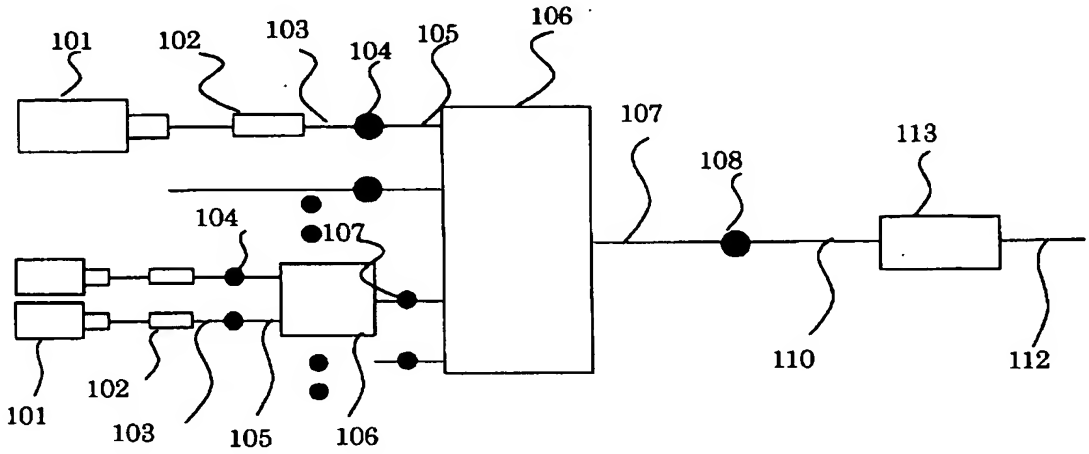

101
102
103
104
105
106
107
108
113
110
112

FIG. 23

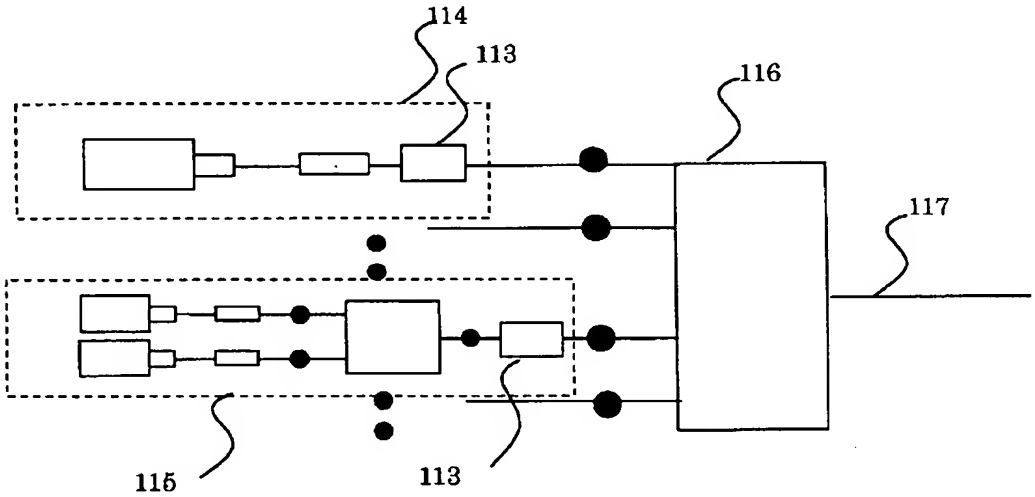

114
113
116
117
115
113

FIG. 24

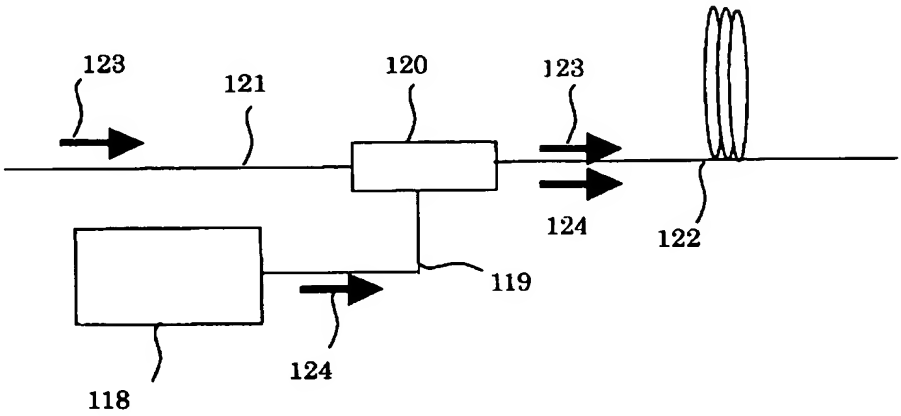



FIG. 25A

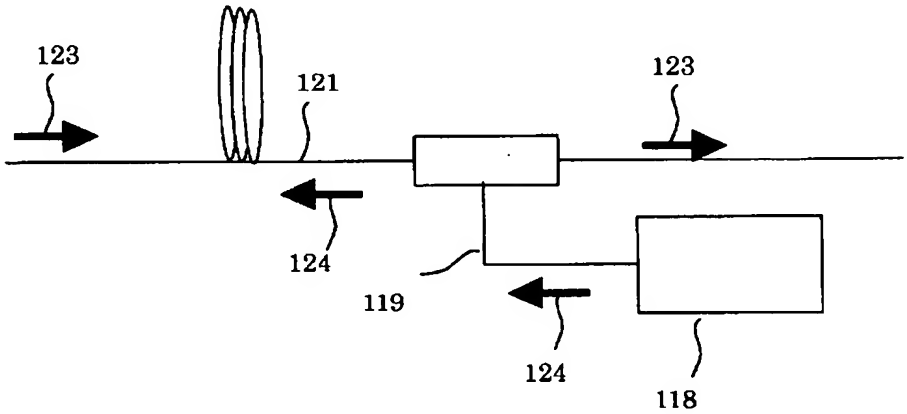



FIG. 25B

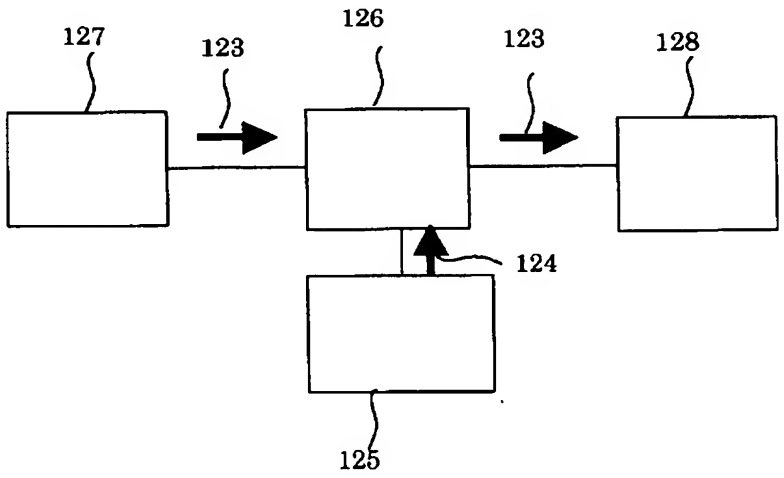



FIG. 26